

**THE CLAIMS:**

This listing will replace all prior versions and listings of claims in the application.

**LISTING OF CLAIMS:**

1-17. (Canceled)

18. (Previously Presented) The method of claim 32, wherein said fluorescently-labeled steroid hormone receptor ligand includes a fluorescent label selected from the group consisting of fluorescein, fluoresceinamine, DTAF, Texas Red, BODIPY dyes, Alexa dyes, tetramethylrhodamine (TMR), and conjugatable derivatives thereof.

19. (Previously Presented) The method of claim 32, wherein said ligand binding domain (LBD) of a steroid hormone receptor is fused to an N-terminal domain selected from the group consisting of glutathione-S-transferase (GST), maltose binding protein (MBP), and thioredoxin (TRX).

20-21. (Canceled)

22. (Previously Presented) The method of claim 32, wherein said fluorescently-labeled steroid hormone receptor ligand binds to said LBD with a  $K_d$  of less than 20nM.

23. (Canceled)

24. (Previously Presented) The method of claim 32, wherein said fluorescently-labeled steroid hormone receptor ligand is capable of competing with a known ligand of said steroid hormone receptor for binding to said steroid hormone receptor.

25-29. (Canceled)

30. (Previously Presented) The method of claim 22, wherein said K<sub>d</sub> is 0.8±0.1 nM and wherein said steroid hormone receptor is GR.

31. (Previously Presented) The method of claim 22, wherein said K<sub>d</sub> is 2.5 nM and wherein said steroid hormone receptor is PR.

32. (Currently amended) A method for ~~monitoring~~ detecting a binding interaction of a steroid hormone receptor (SHR) with a test ligand comprising:

(a) providing a first mixture comprising a fluorescently-labeled steroid hormone receptor ligand, a test compound and a ligand binding domain (LBD) of a steroid hormone receptor selected from the group consisting of an androgen receptor (AR), a glucocorticoid receptor (GR), and a progesterone receptor (PR), and

(b) measuring the fluorescence polarization of the first mixture,

(c) providing a second mixture comprising the fluorescently-labeled steroid hormone receptor ligand and the LBD of a steroid hormone receptor,

(d) measuring the fluorescence polarization of the second mixture, and

(e) comparing the fluorescence polarization of the second mixture and the fluorescence polarization of the first mixture to determine if the test compound affects binding of the fluorescently-labeled steroid hormone receptor ligand to the LBD of a steroid hormone receptor,

wherein the steroid hormone receptor ligand includes a steroid selected from the group consisting of a 5 $\alpha$ -androstane derivatized at one or more of the 1, 3, 6, 7, 11, 15, 17, 18, or 19 positions with a linker conjugated to a fluorescent label; a 4-androstene derivatized at one or more of the 1, 3, 6, 7, 11, 15, 17, 18, or 19 positions with a linker conjugated to a fluorescent label; a

4-pregnen derivatized at one or more of the 3, 6, 7, 11, 17, 19, 20 or 21 positions with a linker conjugated to a fluorescent label; and a dexamethasone derivatized at position 21 with a linker conjugated to a fluorescent label.

33-34. (Canceled)

35. (Previously Presented) The method of claim 32, wherein the LBD is a full length steroid hormone receptor.

36. (New) A method for detecting a binding interaction of a steroid hormone receptor (SHR) with a test ligand comprising:

(a) providing a first mixture comprising a fluorescently-labeled steroid hormone receptor ligand, a test compound and a ligand binding domain (LBD) of a steroid hormone receptor selected from the group consisting of an androgen receptor (AR), a glucocorticoid receptor (GR), and a progesterone receptor (PR),

(b) measuring the fluorescence polarization of the first mixture,

(c) providing a second mixture comprising the fluorescently-labeled steroid hormone receptor ligand and the LBD of a steroid hormone receptor,

(d) measuring the fluorescence polarization of the second mixture, and

(e) comparing the fluorescence polarization of the second mixture and the fluorescence polarization of the first mixture to determine if the test compound affects binding of the fluorescently-labeled steroid hormone receptor ligand to the LBD of a steroid hormone receptor,

wherein the steroid hormone receptor ligand includes a steroid selected from the group consisting of a 5 $\alpha$ -androstan derivatized at one or more of the 1, 3, 6, 7, 11, 15, 17, 18, or 19 positions with a linker conjugated to a fluorescent label; a 4-androsten derivatized at one or more

of the 1, 3, 6, 7, 11, 15, 17, 18, or 19 positions with a linker conjugated to a fluorescent label; a 4-pregnen derivatized at one or more of the 6, 7, 11, 17, 19, 20 or 21 positions with a linker conjugated to a fluorescent label; and a dexamethasone derivatized at position 21 with a linker conjugated to a fluorescent label.

37. (New) A method for detecting a binding interaction of a steroid hormone receptor (SHR) with a test ligand comprising:

(a) providing a first mixture comprising a fluorescently-labeled steroid hormone receptor ligand, a test compound and a ligand binding domain (LBD) of a steroid hormone receptor selected from the group consisting of an androgen receptor (AR), a glucocorticoid receptor (GR), and a progesterone receptor (PR),

(b) measuring the fluorescence polarization of the first mixture,

(c) providing a second mixture comprising the fluorescently-labeled steroid hormone receptor ligand and the LBD of a steroid hormone receptor,

(d) measuring the fluorescence polarization of the second mixture, and

(e) comparing the fluorescence polarization of the second mixture and the fluorescence polarization of the first mixture to determine if the test compound affects binding of the fluorescently-labeled steroid hormone receptor ligand to the LBD of a steroid hormone receptor,

wherein the steroid hormone receptor ligand includes a steroid selected from the group consisting of a 5 $\alpha$ -androstan derivatized at one or more of the 1, 3, 6, 7, 11, 15, 17, 18, or 19 positions with a linker conjugated to a fluorescent label; a 4-androsten derivatized at one or more of the 1, 3, 6, 7, 11, 15, 17, 18, or 19 positions with a linker conjugated to a fluorescent label; and a dexamethasone derivatized at position 21 with a linker conjugated to a fluorescent label.